APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,755	05/02/2001	William Douglas Poynter	9425	6062

26884	7590	12/12/2005

PAUL W. MARTIN
NCR CORPORATION, LAW DEPT.
1700 S. PATTERSON BLVD.
DAYTON, OH 45479-0001

EXAMINER
STEVENS, THOMAS H

ART UNIT	PAPER NUMBER
2123	

DATE MAILED: 12/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

UNITED STATES PATENT AND TRADEMARK OFFICE

MAILED

DEC 1 2 2005

Technology Center 2100

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Application Number: 09/847,755
Filing Date: May 02, 2001
Appellant(s): POYNTER, WILLIAM DOUGLAS

Peter H. Priest
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 9/29/05 appealing from the Office action

mailed 3/25/05.

(1) Real Parties in Interest

The real part in interest is the assignee, NCR Corporation.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial

proceedings that will directly affect or be directly affected by or have a bearing on

the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellants' statement of the status of amendments after final rejection

contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellants' statement of the grounds of rejection to be reviewed on appeal is

correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

No evidence is relied upon by the examiner in the rejection of the claims under

appeal.

(9) Grounds of Rejection

The following ground of rejection is applicable to the appealed claims. The

examiner maintains rejection as stated within the prosecution dated 3/25/05.

Claim Rejections - 35 USC § 103

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating

    obviousness or nonobviousness.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-12 rejected under 35 U.S.C. 103 (a) as obvious by Dowling et al., (U.S.

Patent 5,995,086 (1999)), in view of NEC Corporation ("Character Pattern Editor for On-

Screen Display of LSI for Windows" (November (2000)). Dowling et al. teaches a

method of displaying predefined characters contained in a font, which maintains their

design properties over a font design axis; but doesn't teach an elaborate Windows™ on

screen editor. NEC Corporation ("Character Pattern Editor for On-Screen Display of LSI

for Windows") teaches a character pattern editor on-screen display for windows (title).

At the time of invention, it would have been obvious to one of ordinary skill in the

art to modify Dowling et al. by way of NEC Corporation to provide superior user

interfacing and easier operability for the user to reference and edit large volumes of

data (NEC: pg. 11, 3rd paragraph).

Claim 1. A dot matrix display design tool (Dowling: abstract), comprising: a font designer

for creating a character set comprising a plurality of characters and a character design

associated with each of the characters, the character design comprising a pattern of

selected and (Dowling: abstract with figure 3) deselected pixel positions in a matrix of

pixel positions, the font desirer creating each character desire in response to selections

made by a user (NEC: figure 2-6, "Pattern Edit Window", pg. 24, (4), page 37,3.2.3,

sentence 1), the font designer further allowing the user to save and delete characters as

desired; and a display designer comprising a text input entry interface for text input by a

user and a character set selection interface to allow user selection of a selected

character set for displaying the text, (NEC: page 31, figure 3-1 and description; Dowling:

column 1, lines 27-39) the display designer further comprising an operating

characteristics interface for receiving operating characteristics entries specifying

operating characteristics of an operating display to be emulated (Dowling: columns 1

and 2, lines 65-67,1-2, respectively), the display designer further including a display

emulator presenting a representation of the operating displays, the representation of the

operating display presenting the text input in a format reflecting the selected character

set and exhibiting the operating characteristics specified by the operating characteristics

entries, the display designer further including a set of editing tools to allow modification

of the display in response to selections made by a user, (NEC: figure 2-6, "Image View

Window" and "Hex Dump Window", page 32, Figure 3-2 and description) the editing

tools supporting modification of the character set and the operating characteristics of

the display, (NEC: page 31, figure 3-1 and description) modifications made using the

editing tools being reflected in the appearance of the text as presented by the display

emulator.

Claim 2. The design tool of claim 1 (Dowling: abstract; Dowling: abstract with figure 3;

NEC: figure 2-6, "Pattern Edit Window", pg. 24, (4), page 37,3.2.3, sentence 1; NEC:

page 31, figure 3-1 and description; Dowling: column 1, lines 27-39) further comprising

a display viewer for emulating a dot matrix display (NEC: pg. 34, section 3.2.2 with

Dowling: columns 1-2, lines 65-67 and 1-2, respectively), the display viewer being

operative to receive input text and a character set selection, the display viewer being

further operative to display the input text in a format reflecting the character set

selection, the display viewer being operative to simulate additional characteristics of a

dot matrix display in displaying the input text, the display viewer being further operative

to modify the additional characteristics in response to user selections (NEC: figure 2-6,

"Pattern Edit Window", pg 24, (4) and figure 2-8).

Claim 3. The design tool of claim 2 (Dowling: abstract; Dowling: abstract with figure 3;

NEC: figure 2-6, "Pattern Edit Window", pg. 24, (4), page 37,3.2.3, sentence 1; NEC:

page 31, figure 3-1 and description; Dowling: column 1, lines 27-39) wherein the display

emulator is a first display emulator and the display designer further comprises a second

display emulator, the first and second display emulators allowing the user to

simultaneously view first and second text entries and to view results (NEC: pgs. 19, 27)

of independent selections and modifications relating to the first and second text entries.

Claim 4. The design tool of claim 3 (Dowling: abstract; Dowling: abstract with figure 3;

NEC: figure 2-6, "Pattern Edit Window", pg. 24, (4), page 37,3.2.3, sentence 1; NEC:

page 31, figure 3-1 and description; Dowling: column 1, lines 27-39; NEC: pgs. 19, 27)

wherein the font desirer comprises a dot matrix designer comprising an array of pixel

positions to be selected or deselected by the user, the font desirer allowing user

selection of each of a plurality of characters and allowing the user to select use the dot

matrix designer to select or deselect pixel positions to create an array of pixels to be

associated with the selected character (NEC: Figure 2-6, "Pattern Edit Window", page

24, (4), page 37, 3.2.3 sentence 1).

Claim 5. The design tool of claim 4 (Dowling: abstract; Dowling: abstract with figure 3;

NEC: figure 2-6, "Pattern Edit Window", pg. 24, (4), page 37,3.2.3, sentence 1; NEC:

page 31, figure 3-1 and description; Dowling: column 1, lines 27-39; NEC: pgs. 19, 27;

NEC: Figure 2-6, "Pattern Edit Window", page 24, (4), page 37, 3.2.3 sentence 1)

wherein the font designer allows user specification of a character size to be associated

with a character set and wherein the font designer sets dimensions of the array of pixel

positions according to the character size specified by the user (Dowling: column 2, lines

27-39; NEC: Figure 2-6, "Pattern Edit Window", page 24).

Claim 6. The design tool of claim 5 (Dowling: abstract; Dowling: abstract with figure 3;

NEC: figure 2-6, "Pattern Edit Window", pg. 24, (4), page 37,3.2.3, sentence 1; NEC:

page 31, figure 3-1 and description; Dowling: column 1, lines 27-39; NEC: pgs. 19, 27;

NEC: Figure 2-6, "Pattern Edit Window", page 24, (4), page 37, 3.2.3 sentence 1)

wherein the editing tools allow specification of contrast, pixel height and widths spacing

between rows of pixels making up a character and spacing between columns of pixels

making up a character (NEC: figure 2-6, "Pattern Edit Window", page 24. (4), page 37,

3.2.3, sentence 1; Dowling: column 3, lines 50-67).

Claim 7. The design tool of claim 6 (Dowling: abstract; Dowling: abstract with figure 3;

NEC: figure 2-6, "Pattern Edit Window", pg. 24, (4), page 37,3.2.3, sentence 1; NEC:

page 31, figure 3-1 and description; Dowling: column 1, lines 27-39; NEC: pgs. 19, 27;

NEC: Figure 2-6, "Pattern Edit Window", page 24, (4), page 37, 3.2.3 sentence 1)

wherein the display viewer allows storage of a set of messages and cycling between the

messages at a rate selected by the user (NEC: pg. 20, "Save" command).

Claim 8. The design tool of claim 7 (Dowling: abstract; Dowling: abstract with figure 3;

NEC: figure 2-6, "Pattern Edit Window", pg. 24, (4), page 37,3.2.3, sentence 1; NEC:

page 31, figure 3-1 and description; Dowling: column 1, lines 27-39; NEC: pgs. 19, 27;

NEC: Figure 2-6, "Pattern Edit Window", page 24, (4), page 37, 3.2.3 sentence 1; NEC:

pg. 20, "Save" command) wherein the display viewer allows scrolling of a displayed

message at a rate selected by the user (NEC: figures 2-6, 2-8,2-9, scroll bars at right

side of windows allows scrolling through the messages).

Claim 9. The desire tool of claim 8 (Dowling: abstract; Dowling: abstract with figure 3;

NEC: figure 2-6, "Pattern Edit Window", pg. 24, (4), page 37,3.2.3, sentence 1; NEC:

page 31, figure 3-1 and description; Dowling: column 1, lines 27-39; NEC: pgs. 19, 27;

NEC: Figure 2-6, "Pattern Edit Window", page 24, (4), page 37, 3.2.3 sentence 1; NEC:

pg. 20, "Save" command; NEC: figures 2-6, 2-8,2-9, scroll bars at right side of windows

allows scrolling through the messages) wherein the display viewer includes a set of

editing tools to allow modification of display characteristics, the editing tools (NEC: page

20, Edit Menu and page 21, Palette Menu, pages 34-36, "Editing Palette" and

description) allowing specification of inter word spacing, intercharacter spacing and

spacing surrounding punctuation characters.

Claim 10. A method of display design (Dowling: abstract) for a dot matrix display device

comprising the steps of: creating a character set design in response to selection by a

user of each of a set of character from a character list (NEC: page 31, Figure 3-1 and

description) and specification of pixel values for the character in a matrix designer

providing a visual model of an array of available locations for the character; displaying a

message using the selected character set design, the display of the message

presenting text specified by the user and being presented as the message would

appear in an operating display using the selected character set design (NEC: page 31,

figure 3-1 and description; Dowling: column 1, lines 27-39) and exhibiting operating

characteristics chosen in response to user specifications and modifying aspects of the

design in response to user selections, the appearance of the display of the message

being immediately (Dowling: column 1, lines 40-44) altered to reflect each user

selection.

Claim 11. The method of claim 10 (Dowling: abstract; NEC: page 31, Figure 3-1 and

description; NEC: page 31, figure 3-1 and description; Dowling: column 1, lines 27-39;

Dowling: column 1, lines 40-44) wherein the step of displaying a message includes

displaying a first message simultaneously with a second message and independently

modifying characteristics of each displayed message to allow comparison between the

two displayed messages (NEC: figure 2-6, "Pattern Edit Window", pg 24, (4) and figure

2-8).

Claim 12. The method of claim 11(Dowling: abstract; NEC: page 31, Figure 3-1 and

description; NEC: page 31, figure 3-1 and description; Dowling: column 1, lines 27-39;

Dowling: column 1, lines 40-44; NEC: figure 2-6, "Pattern Edit Window", pg 24, (4) and

figure 2-8) and further including displaying representation of a hardware display limit

using the character set design and modifying selected features of the representation in

response to user selections, tools (NEC: page 20, Edit Menu and page 21, Palette

Menu, pages 34-36, "Editing Palette" and description) the modifications including

modifications to features of the character set design and the operating characteristics of

the hardware display unit being represented each modification being immediately

(Dowling: column 1, lines 40-45) displayed upon entry of a corresponding user

selection.

(10) Response to Arguments

Rejection under 35 § U.S.C. § 103(a) over Dowling in view of NEC

Appellants denote the rejection by Dowling and NEC is to be assessed based

upon the subject matter as whole; examiner acknowledges this point.

In response to appellants' argument (Appeal Brief: pg. 6, lines 3-5) that the

examiner's conclusion of obviousness is based upon improper hindsight reasoning, it

must be recognized that any judgment on obviousness is in a sense necessarily a

reconstruction based upon hindsight reasoning. But so long as it takes into account

only knowledge which was within the level of ordinary skill at the time the claimed

invention was made, and does not include knowledge gleaned only from the appellants'

disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170

USPQ 209 (CCPA 1971). As set forth in the rejection of the claims, all of the limitations

are disclosed in the references of Dowling and in NEC. Furthermore, the motivation for

the combination comes from NEC.

In response to references alleged lack of motivation. The motivation to combine

stems from NEC's skill sets to provide superior user interfacing and easier operability

for the user to reference and edit large volumes of data (NEC: pg. 11, 3rd paragraph).

Appellants' arguments denoting the NEC lack of teaching an "emulating a display

device such as a "virtual" electronic price label employing an LCD display" (appeal brief:

pg.7, 2nd paragraph, lines 15-17) is not agreed with. NEC does disclose emulating a

display. The examiner notes that emulation is merely imitation and the display in NEC

will imitate the display selected, otherwise, the file *"will not be displayed correctly on the*

screen" (see NEC: page. 31). However, the purported limitation, of a "virtual" electronic

price label, is not claimed by appellants.

Independent Claim 1

Appellants argue that both reference, Dowling and NEC, are not directed to the

overall design of a display device (Appeal brief: pg.8, Independent claim 1 section, lines

10-11; underlining added). The examiner refutes this issue since the limitation was not

claimed by appellants (Appeal brief: pg. 8, Independent claim 1 section, lines 10-11).

Appellants argue that neither piece of prior art discloses *" an operating*

characteristic interface for receiving operating characteristics entries specifying

operating characteristics of an operating display to be emulated, the display designer

including a display emulator presenting a representation of the operator display"

(Appeal brief page 8, 3rd paragraph). The examiner points to page 34 of the NEC

document to which the page teaches the user's ability to manipulate a plurality of pixels

by size and shape. To add, the Dowling reference (columns 1 and 2, lines 45-67 and 1-

2, respectively) states properties of a font manipulator called a multiple master type face
to which the user has the ability to vary font size, weight, length and width, all
encompassing its emulation capability.

Appellants argue that neither reference have anything to do with evaluating a
contemplated display. The examiner refutes this issue since no such limitation within
claim1 of a "contemplated display" exists (Appeal brief: pg.9, 3rd paragraph). However,
both NEC and Dowling are concerned with the appearance of characters that are to be
displayed.

Appellants argue that neither reference teaches, "editing tools supporting
modification of the character set..." (Appeal brief: pg. 9, 4th paragraph). One cannot
show nonobviousness by attacking references individually where the rejections are
based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871
(CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).
Secondly, Dowling teaches an editing event: *"The designer has elected to make*
different changes within different specified ranges of weight values in accordance with
the invention" (column 3, lines 46-48). Without an editing tool that modifies the
characters, there can be no editing event.

Independent Claim 10

Appellants argue that neither reference suggests or states "displaying a message
using the selected character set design, the display message presenting text specified
by the user and being presented as a message in an operating display" (Appeal Brief:
pg. 10, 2nd paragraph). Referring to NEC's page 41 reflects three sets of images, six

total. On the left-hand side are character changes, to the right-hand side are Windows indicating either an error or a positive result. Clearly, these results to the right reflect the status of the change of events via an operating display.

Dependent Claims 3 and 11

As set forth in the rejection above, both Dowling and NEC disclose this limitation

Dependent Claim 6

Appellants argue that neither piece of prior art teaches the spacing of rows of pixels (Appeal Brief: pg. 11, 1st paragraph). Clearly, Dowling discloses the significance of each character (column 3, lines 59-67): *"The width, on the other hand, only varies from left to right along in each row. The width and weight variables are independent. Character 70 is wider than character 60; character 80 is wider than character 70; and character 90 is wider than character 80. The same increasing width occurs from left to right in each of the ten rows shown in FIG. 3. However, characters lying in any single column, such as characters 90, 91 and 92 in the right column, all were created using the same value of the width property."*

Furthermore, NEC teaches an editing tool (see response to Independent claim 1).

Dependent Claims 7-9

Appellants argue that neither piece of prior have a need to display messages (Appeal Brief: pg. 11, 2nd paragraph) but denote neither reference teaches nor suggest the particular display claimed for claims 7-9. Based on the latter statement, examiner is unclear as what the issue is? Nonetheless, the examiner interprets the "cycling between

the message at a rate selected by the user" as the user scrolling from one Windows-based frame to anther. Secondly, the interword spacing limitation is similarly argued in claim 6 is inherent since spacing individual words would entail spacing individual letters.

Dependent Claim 12

Appellants argue that neither reference teaches "operating characteristics of the hardware display unit being represented...display emulator" (Appeal Brief: pg. 12, paragraphs 1-3). Examiner respectfully refutes appellants' argument by way of inherency since the invention is computer-based (a hardware property), conjoined to at least one visual monitor. NEC states a basic computer system configuration consisting of a system processor; printer with personal computer (NEC: pg.12) and system character pattern installation (NEC: pg. 15). To add, Dowling's suggestion of a computer processor with emulation features: *"Because multiple master typefaces are generated on-the-fly, substantially less computer storage space is required than was necessary where the entire font was maintained in storage for each weight, width or design required* (Dowling: column, 1 lines 58-61)...*a multiple master typeface can be used to automatically emulate a specified font with a high degree of accuracy* (Dowling, columns 1 and 2, lines 67 and 1-2, respectively).

Furthermore, appellants assert neither piece of prior art teaches nor suggest a method for a design of a dot matrix visual display (Appeal Brief: pg. 12, 4th paragraph). The examiner finds this issue irrelevant since this limitation is silent within claim 12.

The Examiner's Findings of Obviousness are also Contrary to Law of the Federal Circuit

In response to appellants' argument (Appeal brief: pg. 13, 1st paragraph) regarding the examiner's conclusion of obviousness is based upon improper hindsight reasoning. In response, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the appellants' disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Only permissible hindsight has been used since all of the limitations are contained in the references and the motivation to combine comes from the references.

Appellants assert that the references teach away from the claimed invention (Appeal brief: pg. 13, 2nd paragraph). Examiner respectfully refutes this argument as irrelevant since appellants have not provided examples to substantiate their argument. To reiterate, the reasons to combine, (Appeal brief: pg. 14, paragraphs 1-3) as stated in Independent claim 1, by which it would have been obvious to one of ordinary skill in the art to modify Dowling et al. by way of NEC Corporation to provide superior user interfacing and easier operability for the user to reference and edit large volumes of data (NEC: pg. 11, 3rd paragraph).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the

Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Thomas H. Stevens
Examiner
Art Unit 2123

November 29, 2005

Conferees:

Leo Picard

Anthony Knight

LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100